

## ENVIRONMENTAL CHECKLIST

### *Purpose of Checklist:*

The State Environmental Policy Act (SEPA), Chapter 43.21 RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

### *Instructions for Applicants:*

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring the preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the question from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply". Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe the your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or to provide additional information reasonably related to determining if there may be significant adverse impact.

### *Use of checklist for nonproject proposals:*

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (Part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

### **A. BACKGROUND**

1. Name of proposed project, if applicable: **Quartermaster Harbor Mooring Buoy Plan**
2. Name of applicant: **Department of Natural Resources, Aquatic Resources Division**
3. Address and phone number of applicant and contact person: **Lisa M. Randlette / 360.902.1085 / P.O. Box 47027, Olympia, WA 98504-7027**
4. Date checklist prepared: **November 16, 2012**
5. Agency requesting checklist: **Department of Natural Resources**
6. Proposed timing or schedule (including phasing, if applicable): **Conduct public review of draft Quartermaster Harbor Mooring Buoy Plan – November 26, 2012 – January 7, 2013 / Finalize and adopt Plan as a supplement to the Maury Island Environmental Aquatic Reserve Management Plan – January – February, 2013**
7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. **DNR does not have any plans but would encourage King County to create an**

authorized public access point to inner Quartermaster Harbor to replace the two informal locations at Burton Cove that are currently being used by people to park vehicles, launch dinghies, and row out to moored boats.

Implementation of Quartermaster Harbor Mooring Buoy Plan may include DNR application for regulatory permits from King County, Washington Department of Fish & Wildlife, and U.S. Army Corps of Engineers; removing unauthorized and abandoned or derelict buoys and associated anchors and gear; or authorizing buoy installation to standards that meet regulatory permit requirements.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
- Maury Island Environmental Aquatic Reserve Management Plan, October 29, 2004 prepared by DNR. Proposed actions to address existing mooring buoys in Quartermaster Harbor. The Draft Quartermaster Harbor Mooring Buoy Plan implements the Reserve management plan.
  - Final Supplemental Environmental Impact Statement – Maury Island Environmental Aquatic Reserve, October 29, 2004, prepared by DNR.
  - Draft Quartermaster Harbor Mooring Buoy Management Plan, November 2012 prepared by DNR. Provides information about the environmental conditions at the proposal site.

Documents can be accessed online at: [www.dnr.wa.gov/ResearchScience/sepa/Pages/Home.aspx](http://www.dnr.wa.gov/ResearchScience/sepa/Pages/Home.aspx) or by contacting DNR at (360) 902- 1739 or by coming to SEPA Center, 4<sup>th</sup> Floor, DNR 1111 Washington Street SE, Olympia, WA 98504, Monday through Friday between 8-4:30.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? No. If yes, explain.
10. List any government approvals or permits that will be needed for your proposal, if known.  
The following may be needed for plan implementation, but not for adopting the plan:  
King County Shoreline Substantial Development Permit,  
Washington Department of Fish & Wildlife Hydraulic Project Approval (HPA),  
U.S. Army Corps of Engineers Permit.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agency may modify this form to include additional specific information on project description.) In the Quartermaster Harbor Mooring Buoy Management Plan, DNR considered three management options for the existing, unauthorized recreational mooring buoys in Burton Cove and Dockton areas and along the shoreline of Quartermaster Harbor, Maury Island Environmental Aquatic Reserve. These areas have a high concentration of mooring buoys, and a number of potential navigation and safety, and environmental protection issues have been identified. When properly designed and authorized, mooring buoys provide appropriate access for recreational vessels and decrease impacts of anchoring within the Reserve, such as scouring and/or crushing of aquatic vegetation, marine life, and other substrates.

DNR's preferred management option proposes to:

**Short-term**

- Establish mooring buoy fields in Burton Cove and Dockton at a density that would avoid unsafe navigational conditions and potential vessel collisions.
- Designate navigation channels to accommodate safe egress and ingress.
- Evaluate eelgrass and herring spawn data, and possibly re-sample.
- Authorize installation of recreational mooring buoys with midline floats and appropriately-sized embedded anchors or allow applicants currently using existing concrete anchors to phase in embedded anchors over a short period of time, in order to conform with regulatory requirements.

**Long-term**

- Remove abandoned or derelict buoys in the mooring buoy areas as funding becomes available.
- Encourage King County to establish a paid harbor master position for monitoring and enforcement.
- Encourage King County Parks or Vashon Park District to establish a public access point in Burton.

Two other management options were considered but are not proposed (additional description is available in the draft plan, section 11):

1) **Maintain current management approach.**

When requested DNR would consider issuing mooring buoy licenses to those applicants who can provide documentation of regulatory permission from King County, Washington State Department of Fish & Wildlife, and the U.S. Army Corps of Engineers (Corps). This option was not selected because it would result in continuing navigational safety concerns, which is inconsistent with supporting traditional boating activities with the aquatic reserve. Environmental conditions in existing buoy anchorage areas would not measurably improve.

2) **Remove all unauthorized mooring buoys from state-owned aquatic lands.**

DNR would notify owners that their existing buoys are unauthorized and must be removed from state-owned aquatic lands within a set timeframe, as a necessary proprietary management enforcement action. As funding is available, DNR would remove unauthorized buoys over time. DNR would refer any currently-pending buoy license applicants to King County, Washington State Department of Fish & Wildlife, and the Corps to obtain regulatory permissions before DNR would consider their applications. This option was not selected because it may encourage buoy owners to move their buoys to shallow, private tidelands and result in additional sediment disturbance and scouring of habitat. This option doesn't meet reserve management goals of: conserving native habitats and associated plant and wildlife species; and supporting traditional boating activities since implementation would displace many long-term buoy users.

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographical map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any applications related to this checklist. **The Quartermaster Harbor Mooring Buoy Plan study area encompasses the tidelands and bedlands of navigable waters, owned by the State of Washington, within the portion of Maury Island Environmental Reserve identified as Quartermaster Harbor. The reserve is located in central Puget Sound, southwest King County, Washington, and includes state-owned aquatic lands in Quartermaster Harbor on the east of Vashon Island and around much of Maury Island. Vashon Island is about 12 miles long. Maury Island is about 6 miles long and connected to Vashon Island by a narrow isthmus. Vashon Island can be reached by public ferry from the south by way of the Point Defiance to Tahlequah ferry terminals and from the north by way of the Fauntleroy and West Seattle to Vashon ferry terminals.**

**Study Area Boundary Legal Description:**

**All or portions of the tidelands and bedlands in the following:**

**Twn 22N, Rge 3E, Sections 8, 9, 16, 17-21, 29, 30, 31**

**Twn 21N, Rge 3E, Sections 5, 6**

**Twn 22N, Rge 2E, Sections 24, 25, 36**

**Situated in Quartermaster Harbor, King County, Washington.**

**B. ENVIRONMENTAL ELEMENTS**

1. Earth

- a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountains, other . **Tidelands and bedlands within Quartermaster Harbor extend to a depth of 70 feet (21.4 meters) below mean lower low water, or one-half mile from the line of extreme low tide, whichever is farther waterward.**
- b. What is the steepest slope on the site (approximate percent slope)? NA
- c. What general types of soils (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. **The subtidal sediments in Inner Quartermaster**

Harbor are classified as mud, but the mud is much deeper than areas in outer Quartermaster Harbor (Maury Island Environmental Aquatic Reserve Final Management Plan, October 29, 2004 p.13)

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. **NA**
- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill. **None.**
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. **NA**
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? **NA**
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: **NA**

2. Air

- a. What types of emissions to the air would result from this proposal (i.e. dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known. **Minor, temporary air emissions may occur associated with Plan implementation such as removal, relocation, or installation of recreational mooring buoys.**
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. **NA**
- c. Proposed measures to reduce or control emissions or other impacts to air, if any: **Consider staging any removal, relocation, or installation of recreational mooring buoys at multiple sites in a coordinated manner. All equipment will meet emission standards.**

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. **Quartermaster Harbor is a relatively shallow (up to 70 feet deep), protected embayment between Vashon and Maury Island, located in central Puget Sound and southwestern King County. Transition zones between freshwater surface flows and the marine waters of the Harbor include the estuaries at the mouth of Judd Creek, Fisher Creek, and Raab's Lagoon. Many smaller streams and seeps deliver freshwater to the Harbor and have large seasonal effects on habitat conditions.**

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. **Implementation of the Quartermaster Harbor Mooring Buoy Plan would include removal, relocation, and installation of recreational mooring buoys. Some eelgrass/herring spawn sampling may also occur. All such work would be subject to regulatory permits.**

**Some temporary disturbance of the marine bed would occur in the course of removing any unauthorized buoy anchor systems or placing any authorized buoy anchor systems.**

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of the fill material. **None.**

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. **No**

5) Does the proposal lie within a 100 year floodplain? If so, note location on the site plan. **Marine waters.**

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. **No**

b. Ground:

1) Will groundwater be withdrawn, or will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. **No**

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number such systems, the number of houses to be served (if applicable), or the number animals or humans the system(s) are expected to serve. **None would be discharged.**

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities if known). Where will this water flow? Will this water flow into other waters? If so, describe. **No runoff would be created.**

2) Could waste material enter ground or surface waters? If so, generally describe. **No.**

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any: **None.**

4. Plants

a. Check or circle types of vegetation found on the site:

\_\_\_ deciduous tree: alder, maple, aspen, other

\_\_\_ evergreen tree: fir, cedar, pine, other

\_\_\_ shrubs

\_\_\_ grass

\_\_\_ pasture

\_\_\_ crop or grain

\_\_\_ wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other

☒ water plants: water lily, **eelgrass**, milfoil, other **macroalgae**

\_\_\_ other types of vegetation

**Eelgrass appears to have totally disappeared over the past 30 years in Burton. Over the past decade, vegetation was well dispersed throughout Dockton. Other macro algae has disappeared from inner bay and is much less dense throughout Quartermaster Harbor. (See the draft Quartermaster Mooring Buoy Management Plan section 13 and Appendix F for more discussion).**

b. What kind and amount of vegetation will be removed or altered?

**During implementation, incidental disturbance of eelgrass and macroalgae may occur in the course of removing any unauthorized buoy anchor systems or placing any authorized buoy anchor systems.**

c. List threatened or endangered species known to be on or near the site. **None known.**

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

**NA**

5. Animals

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, **heron**, **eagle**, songbirds, other: mammals: deer, bear, elk, beaver, other:



fish: bass, salmon, trout, herring, shellfish, other:

No herring have been documented spawning on eelgrass in Burton Cove since 2001, and there is limited spawning on other substrate. Spawning has occurred on red and brown seaweeds at a few focused sites near the Judd Creek delta. In Dockton, herring spawn was found in different densities and concentrations on the vegetation and other substrate. (See the draft Quartermaster Mooring Buoy plan section 13 and Appendix F for more discussion)

- b. List any threatened or endangered species known to be on or near the site.

**Federal Listing as Threatened –Marbled murrelet. Federal Listing as Endangered – Killer whale.** Federal listing as Threatened: Puget Sound Chinook Salmon. **Regionally important habitats for species or populations of interest within the study area include river otters, harbor seals, and less frequently killer whales, harbor porpoises and California sea lions. Regionally important habitats for species or populations of interest within the study area include: forage fish spawning grounds, including herring, surf smelt and sand lance; salmonids (i.e. Chinook, coho, chum, steelhead, cutthroat) rearing areas and migratory corridors; bottom fish rearing habitat; and an important wintering ground for migratory marine birds including western grebes. Herring spawning grounds and western grebe wintering grounds of the quality found within the reserve are not replicated anywhere else in the central Puget Sound sub-basin. (Maury Island Environmental Aquatic Reserve Final Management Plan, October 29, 2004 - p.15)**

- c. Is the site part of a migration route? If so, explain.

**“Quartermaster Harbor has been designated an Important Bird Area (IBA) by the Audubon Society of Washington and supports approximately 8 percent of Washington’s wintering population of Western grebe (Cullinan 2001). In addition to grebe, the area provides winter refuge for approximately 3,000 individuals from 35 species of aquatic birds annually (Cullinan 2001).” (Maury Island Environmental Aquatic Reserve Final Management Plan, October 29, 2004 - p.100)**

- d. Proposed measures to preserve or enhance wildlife, if any:

**Any recreational buoy anchor systems that DNR may authorize would avoid eelgrass and include midline floats to minimize potential scouring of bottom sediments. Anchoring Systems would be designed to avoid or minimize impacts to benthic habitats.**

## 6. Energy and Natural Resources

- a. What kinds of energy (electrical, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. **NA**
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. **NA**
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: **NA**

## 7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

**There are no additional hazards or risks compared to the existing risks associated with existing boats/other structures moored in the harbor. There is some potential for oil/fuel spills and fire resulting from moored vessels.**

- 1) Describe any emergency services that might be required.

**Emergency services are not anticipated to be required. Implementation of the proposed preferred plan alternative would reduce risk of moored vessels accidentally dragging anchor and colliding with other vessels in the vicinity by requiring installation of adequate anchoring systems and would reduce the need for any emergency services.**

- 2) Propose measures to reduce or control environmental health hazards, if any:

**No live-aboard vessels would be authorized in the Quartermaster Harbor Mooring Buoy Plan, avoiding**

waste discharge into marine waters.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? NA
- 3) What types and levels of noise would be created by or associated with the project on a short-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.  
**Implementation of the preferred plan alternative would result in temporary, increased noise from vessels and hydraulic equipment associated with installation of approved buoy anchor systems and removal of unauthorized anchors, unauthorized vessels and associated debris. Daylight hours on weekdays and weekends.**
- 3) Proposed measures to reduce or control noise impacts, if any: NA

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties?  
**The site is part of a DNR aquatic reserve (see h. below). Recreational vessel moorage occurs throughout Quartermaster Harbor, with concentrations in Burton Cove and Dockton. Approximately 200 mooring buoys are installed on state-owned aquatic lands in the harbor. Adjacent waterfront properties are low-density residential. Two private, recreational marinas are located in Burton Cove. Vashon Park District maintains a public, no-fee boat launch and parking on the Burton peninsula as part of Burton Acres Park. King County Marine Park and Marina is located in Dockton. See the draft Mooring Buoy Plan Land - Use Activities section 8 for more information.**
- b. Has the site been used for agriculture? If so, describe. No
- c. Describe any structures on the site.  
**The study area encompasses two overwater structures associated with private recreational marinas in Burton Cove and a public short-stay public marina in Dockton at King County Marine Park. An unauthorized netpen structure is located in Dockton.**
- d. Will any structures be demolished? if so, what?  
**The unauthorized netpen structure will be removed as it is not an appropriate use in this location.**
- e. What is the current zoning classification of the site? NA
- f. What is the current comprehensive plan designation of the site? **King County designated Vashon and Maury Islands as a Rural Area under the generalized comprehensive land use plan.**
- g. If applicable, what is the current shoreline master program designation of the site? **King County Shoreline Management Master Program designates Quartermaster Harbor as 'Aquatic Shoreline' and the surrounding waterfront shorelines are designated 'Rural,' 'Conservancy,' and 'Natural'.**
- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.  
**The study area is part of the Maury Island Environmental Aquatic Reserve, designated by the Washington Department of Natural Resources (DNR) on November 8, 2004 by Commissioner's Order 200423. The area has been designated as "critical nearshore habitat" for Puget Sound Chinook Salmon according to the National Marine Fisheries Service (<http://www.nmfs.noaa.gov/gis/data/critical>).**
- i. Approximately how many people would reside or work in the completed project? **None.**
- j. Approximately how many people would the completed project displace? **None known.**
- k. Proposed measures to avoid or reduce displacement impacts, if any: **None.**

1. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: **DNR would adopt the Plan as a supplement to the Maury Island Aquatic Reserve Final Management Plan, originally adopted October 29, 2004. As part of Plan implementation, DNR would apply for any necessary regulatory approvals from King County, Washington State Department of Fish & Wildlife, and the U.S. Army Corps of Engineers. DNR would cooperate with King County as the County develops future nitrogen management policies for Quartermaster Harbor.**

**The King County Shoreline Management Master Program designates Quartermaster Harbor as 'Aquatic Shoreline' and the surrounding waterfront shorelines are designated 'Rural,' 'Conservancy,' and 'Natural'. Under King County shoreline regulations allow placement of recreational mooring buoys sent prior to November 22, 1976 would be considered a legal, non-conforming use. King County may allow residential shoreline property owners to maintain a new or unpermitted recreational mooring buoy for personal use if the owners apply for a Shoreline Exemption. Authorization of recreational mooring buoys owned by people other than residential shoreline property owners would require authorization by obtaining a Substantial Development Permit. DNR's Plan for authorizing buoys in specific locations on state-owned aquatic lands will be compatible with King County's shoreline regulations and permit conditions.**

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle or low-income housing. **NA**
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. **None known.**
- c. Proposed measures to reduce or control housing impacts, if any: **None.**

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? **NA**
- b. What views in the immediate vicinity would be altered or obstructed?  
**Existing, unauthorized mooring buoys and associated vessels may be removed over time as resources become available. Mooring buoys and associated vessels may be authorized and / or relocated to ensure navigational safety and environmental protection.**  
**The overall number of moored recreational vessels on state-owned aquatic lands in Quartermaster Harbor would stay approximately the same. Vessels currently concentrated into Burton Cove and Dockton would be spaced farther apart to avoid potential collisions.**
- c. Proposed measures to reduce or control aesthetic impacts, if any: **Derelict buoys, vessels, rafts, and associated debris would be removed over time as resources permit.**

11. Light and Glare

- a. What kind of light or glare will the proposal produce? What time of day would it mainly occur? **NA**
- b. Could light or glare from the finished project be a safety hazard or interfere with views? **NA**
- c. What existing off-site sources of light or glare may affect your proposal? **NA**
- d. Proposed measures to reduce or control light and glare impacts, if any: **NA**



12. Recreation

- a. What designated and informal recreation opportunities are in the immediate vicinity?  
**King County Marine Park and Marina is located at Dockton. Recreational boating, waterskiing, swimming, and rowing occurs throughout the study area. In the lower Quartermaster Harbor, recreational fishing and crabbing occurs on a seasonal basis.**
- b. Would the proposed project displace any existing recreational uses? If so, describe. **The plan would relocate certain unauthorized recreational mooring buoy systems that pose a risk to navigational safety or potential adverse environmental impacts. The future number of authorized buoy systems would be greater than the number of currently moored boats. Authorized buoys would be positioned farther apart in Dockton and Burton Cove than the current configuration of unauthorized buoys to reduce the risk of accidental collision.**
- c. Proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant, if any: **The plan would designate appropriate recreational mooring buoy locations and buoy systems to ensure vessel swings do not posed a risk of collision for moored vessels, and improve safety when navigating within the navigational channel, between buoys, and to and from waterfront properties.**

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.  
**“Historical portage from the northeast corner of Quartermaster Harbor to Tramp Harbor in the Puget Sound: The historical portage site is not registered on the historic register. During the period when the portage was still submerged at high tide, the area was a favorite fishing and hunting ground of the Nisqually people. Nets in this area were used to capture abundant waterfowl (Larkin 1975).  
“Historic Clam Middens: Clam middens were excavated on the north shore of Burton Peninsula in 1996 by University of Washington’s Department of Archaeology (Joseph 1996).” (Maury Island Aquatic Reserve Final Management Plan, October 29, 2004, p.16)**
- b. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site? If so, generally describe. **None known.**
- c. Proposed measures to reduce or control impacts, if any: **None. The proposal is not located in the vicinity of the historical portage site.**

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans if any. **The Quartermaster Harbor study area is accessible at three public location in Burton: Burton Acres Park managed by the Vashon Parks District; 99<sup>th</sup> St S.W. undeveloped King County street right- of-way adjacent to Vashon Park District-owned tidelands; and a developed King County street right-of-way at Quartermaster Marina. Dockton County Marine Park and Marina provides access to Quartermaster Harbor from S.W. Dock Street, including a boat ramp with associated public parking area and transient recreational vessel docking at the public marina.**
- b. Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop? **NA**
- c. How many parking spaces would the completed project have? How many would the project eliminate? **NA**
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private). **No, although DNR would encourage King County or Vashon Park District to designate a public access area.**
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. **Implementation will require water transportation within the harbor for surveys and for mooring buoy**

removal and/or installation.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur. **Boater vehicle trips to access moored vessels would vary throughout the year, depending on favorable weather conditions. Peak volumes of activity are more likely during weekends and summer months. It is unlikely that the amount and frequency of vehicular trips per day will increase with Plan implementation over current volumes since actual existing conditions reflect current use of unauthorized mooring buoys. If the mooring buoy plan is not adopted and existing buoys are removed over time, the amount and frequency of vehicular trips would likely decrease from current volumes.**

g. Proposed measures to reduce or control transportation impacts, if any: **King County regulations require documentation of adequate upland vehicle parking and vessel launch access prior to issuing permits for a mooring buoy. DNR will require compliance with all permit conditions prior to granting a use authorization for a mooring buoy.**

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe. **No.**

b. Proposed measures to reduce or control direct impacts on public services, if any. **Implementation of the plan would result in safer navigational conditions and potentially less need for police response.**

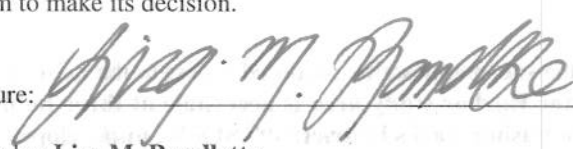
16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other. **NA**

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. **NA**

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: 

Review by: **Lisa M. Randlette**

Title: **Aquatic Resources Division, Environmental Resources Planner**

Date: **11/21/12**

#### D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(Do not use this sheet for project action)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise? **Minor, short-term air emissions would occur associated with any authorized vessel activity and removal, relocation or new installation of recreational mooring buoy systems. All equipment will meet emission standards.**

Proposed measures to avoid or reduce such increases are: **Coordinate staging of removal, relocation or new installation of multiple buoys at the same time.**

2. How would the proposal be likely to affect plants, animals, fish or marine life? **There would be a short-term disturbance to the marine bed from removal/installation of buoy anchors. If plants are present, those would also be disturbed. There are as many as 200 existing anchors in the harbor many which are not embedded and should be removed and/or are allocated in areas outside the planned mooring buoy field.**

**DNR will require buoy owners to remove any existing anchors that do not comply with regulatory standards or are not protective of the environment, as part of authorizing a mooring buoy installation. DNR's implementation of the plan will result in a reduction in the number of environmentally damaging anchor systems in the marine bed over time.**

**Plan implementation would improve long-term conditions for plants, and marine life by: 1) requiring that all mooring buoys obtain regulatory permits and install midline floats on anchor lines to avoid scouring; and 2) removing anchors that may drag across, pull out, or compress bottom sediments.**

Proposed measures to protect or conserve plants, animals, fish, or marine life are: **Remove buoy anchor systems and sunken debris that may drag across or compress bottom sediments.**

3. How would the proposal be likely to deplete energy or natural resources? **NA**

Proposed measures to protect or conserve energy and natural resources are: **NA**

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designed (or eligible or under study) for governmental protection: such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands? **DNR has designated Quartermaster Harbor part of the Maury Island Aquatic Environmental Reserve in part to protect significant environmental habitat for many many threatened and endangered species (see 5.b for list). The purpose of the plan is to identify measures that DNR would implement over time to protect and restore bottom sediment conditions in the study area, consistent with the recommendations of the Maury Island Aquatic Reserve Management Plan.**

Proposed measures to protect such resources or to avoid or reduce impacts are: **Remove buoy anchor systems and sunken debris that may drag across or compress bottom sediments.**

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans? **Traditional recreational boating would be fostered in the study area by establishing best management practices for navigational activities: safe mooring buoy density and installation. The proposal also considers the rights of adjacent waterfront property owners. The proposal would generate vehicle traffic and parking demand from boaters in the vicinity of any authorized mooring buoy area. There is limited public parking available in the Burton**

Cove area for boaters. Some boaters informally store their rowboats or dinghies on adjacent private tidelands and in the undeveloped 99<sup>th</sup> St. S.E. right of way. Implementation of the plan would require boaters to arrange for authorized parking and dinghy storage as part of receiving authorization to place a mooring buoy.

Proposed measures to avoid or reduce shoreline and land use impacts are: **Regular monitoring and removal of any unauthorized uses within the study area.**

6. How would the proposal be likely to increase demands on transportation or public services and utilities? **If unauthorized buoys are removed from the study area, boaters may use King County Parks public boat ramp and marina at Dockton more frequently or for long periods of time than at present. Some boaters may rely on vessel anchors rather than buoy anchors with the potential that more vessels may drift in adverse weather conditions and require more frequent response from King County Sheriff's Marine Unit.**

Proposed measures to reduce or respond to such demand(s) are: **Coordinate public education signage for proper boat anchoring with King County Parks at Dockton public marina and boat launch.**

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment. **The purpose of the Plan is to prescribe best management practices for mooring buoy authorization and maintenance in the environmentally-sensitive water of Quartermaster Harbor which is part of the Maury Island Environmental Aquatic Reserve. Plan implementation of the preferred management option would be consistent with all local, state, and federal regulatory requirements.**

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